CRATE

KXB100
Keyboard Amplifier

User's Guide

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Declaration of Conformity

Manufacturer's Name: SLM Electronics

Corporate Headquarters: 1901 Congressional Drive, St. Louis, Missouri 63146

Primary Production Facility: 700 Hwy 202 W, Yellville, Arkansas, 72687

Product Type: Audio Amplifier

Products meet the regulations for compliance marking under:

ETL standards UL6500, UL60065, or UL813

CSA standards E60065 or C22.2 No.1-M90

CE safety standard EN60065

CE EMC standards EN55103 or EN55013 and EN61000

C-tick designation Level 2, ABN #56748810738, ARBN# N222

KETI standard K60065 (limited model approval)

Compliance Support Contact: SLM Electronics, Attn: R&D Compliance Engineer

1901 Congressional Drive, St Louis, Missouri, 63146 • Tel.: 314-569-0141, Fax: 314-569-0175

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CAUTION	PRECAUCION	ATTENTION
RISK OF ELECTRIC SHOCK DO NOT OPEN	RIESGO DE CORRIENTAZO NO ABRA	RISQUE D'ELECTROCUTION NE PAS OUVRIR
WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	PRECAUCION: PARA REDUCIR EL RIESGO DE INCENDIOS O DESCARGAS ELECTRICAS, NO PERMITA QUE ESTE APARATO QUEDE EXPUESTO A LA LLUVIA O LA HUMEDAD. PARA DISMINUOIR EL RIESGO DE CORRIENTAZO. NO ABRA LA CUBIERTA. NO HAY PIEZAS ADENTRO QUE EL USARIO PUEDO REPARAR DEJE TODO MANTENIMIENTO A LOS TECNICOS CALIFICADOS.	ATTENTION: PROTÉGEZ CET APPAREIL DE LA PLUIE ET DE L'HUMIDITÉ AFIN D'EVITER TOUT RISQUE D'INCENDIE OU D'ELECTROCUTION. POUR REDUIRE D'ELECTROCUTION NE PAS ENLEVER LE COUVERCLE. AUCUNE PIECE INTERNE N'EST REPRABLE PAR L'UTILISATEUR. POUR TOUTE REPARATION, S'ADRESSER A UN TECHNICIEN QUALIFIE.

IMPORTANT SAFETY INSTRUCTIONS

- READ, FOLLOW, HEED, AND KEEP ALL INSTRUCTIONS AND WARNINGS.
- DO NOT OPERATE NEAR ANY HEAT SOURCE AND DO NOT BLOCK ANY VENTILATION OPENINGS ON THIS APPARATUS. FOR PROPER OPERATION, THIS UNIT REQUIRES 3" (75mm) OF WELL VENTILATED SPACE AROUND HEATSINKS AND OTHER AIR FLOW PROVISIONS IN THE CABINET.
- DO NOT USE THIS APPARATUS NEAR SPLASHING, FALLING, SPRAYING, OR STANDING LIQUIDS.
- CLEAN ONLY WITH LINT-FREE DAMP CLOTH AND DO NOT USE CLEANING AGENTS.
- ONLY CONNECT POWER CORD TO A POLARIZED, SAFETY GROUNDED OUTLET WIRED TO CURRENT ELECTRICAL CODES AND COMPATIBLE WITH VOLTAGE, POWER, AND FREQUENCY REQUIREMENTS STATED ON THE REAR PANEL OF THE APPARATUS.
- PROTECT THE POWER CORD FROM DAMAGE DUE TO BEING WALKED ON, PINCHED, OR STRAINED.
- UNPLUG THE APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.
- ONLY USE ATTACHMENTS, ACCESSORIES, STANDS, OR BRACKETS SPECIFIED BY THE MANUFACTURER FOR SAFE OPERATION AND TO AVOID INJURY.
- WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK OR FIRE, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.
- SERVICE MUST BE PERFORMED BY QUALIFIED PERSONNEL.
- OUR AMPLIFIERS ARE CAPABLE OF PRODUCING HIGH SOUND PRESSURE LEVELS. CONTINUED EXPOSURE TO HIGH SOUND PRESSURE LEVELS CAN CAUSE PERMANENT HEARING IMPAIRMENT OR LOSS. USER CAUTION IS ADVISED AND EAR PROTECTION IS RECOMMENDED IF UNIT IS OPERATED AT HIGH VOLUME.

EXPLANATION OF GRAPHICAL SYMBOLS:	=	"DANGEROUS VOLTAGE"		=	"IT IS NECESSARY FOR THE USER TO REFER TO THE INSTRUCTION MANUAL"
EXPLICACION DE SIMBOLOS GRAFICOS:		"VOLTAJE PELIGROSO"			"ES NECESARIO QUE EL USUARIO SE REFIERA AL MANUAL DE INSTRUCCIONES."
EXPLICATION DES SYMBÔLES GRAPHIQUES:		"DANGER HAUTE TENSION"			"REFERREZ-VOUS AU MANUAL D'UTILISATION"

<u>*Congratulations!*</u>

You are now the proud owner of the Crate KXB100 keyboard amplifier. This versatile and great sounding amp features a 15" Crate Custom woofer and two LeSon dome tweeters housed in a ported tuned enclosure. Each of the four discreet channels has its own level and reverb/effect control. Channel 1 also has separate low and high rotary EQ controls, switchable phantom power, and a balanced low impedance mic in jack. The master section features a 5-band graphic equalizer, a balanced line out jack with level control, and CD input jacks which allow you to play along with your favorite music. External effects may be patched into the amplifier by means of the Send and Return jacks, and headphones may be connected for personal monitoring as well as private practice sessions.

The KXB100's angled cabinet allows you to use it as an upward projecting floor monitor or stand it upright like a conventional amplifier.

Like all Crate products, your KXB100 is designed by musicians, and built using only the best components. Extensive testing at the hands (and ears) of skilled technicians and musicians insures you that this amplifier is the absolute best it can be.

In order to get the most out of your new amplifier, we strongly urge you to go over the information contained in this manual before you begin playing.
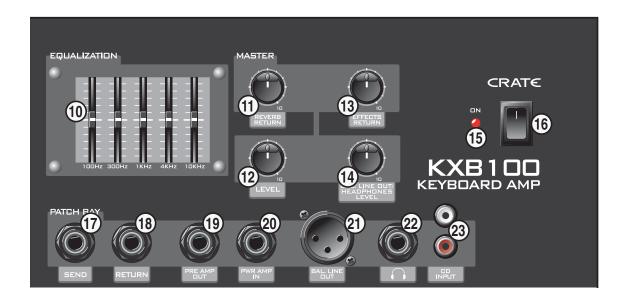
And *<u>thank you</u>* for choosing

1. MIC IN: Use this balanced XLR jack to connect a low impedance balanced microphone signal to Channel 1 of the amplifier by means of a shielded microphone cable.

2. LINE IN: Use this balanced1/4" jack to connect a high impedance microphone or other line level signal to Channel 1 of the amplifier by means of a shielded microphone or instrument cable.

NOTE: Both the Mic In and Line In jacks may used simultaneously, however both of their levels are controlled by the Channel 1 Level control (#3).

3. LEVEL: Use this control to adjust the level of the signal connected to the corresponding channel's input jack.

4. PEAK: This LED illuminates when the corresponding channel's input signal level nears clipping. For the best signal to noise ratio, adjust the channel's Level control until this LED flashes on strong signal peaks.

5. REV/EFF: Use this control to adjust the amount of reverberation applied to the signal at the corresponding input jack.

6. PHANTOM POWER: This switch, when depressed, applies 15 volts of phantom power to the Mic In jack. Engage this switch when using microphones which require phantom power.

7. LOW: Use this control to adjust the low frequency level of the Channel 1 signal. Rotating the control counterclockwise reduces the low frequency output. Rotating the control clockwise increases the low frequency output.

8. HIGH: Use this control to adjust the high frequency level of the Channel 1 signal. Rotating the control counterclockwise reduces the high frequency output. Rotating the control clockwise increases the high frequency output.
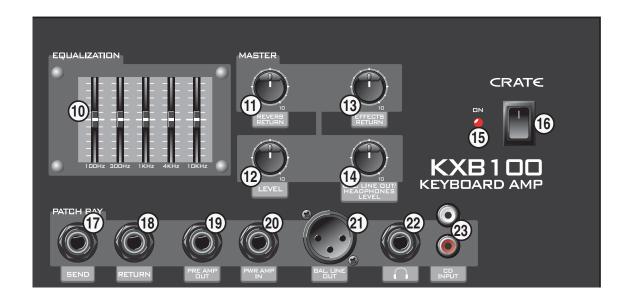
9. INPUT: Use this 1/4" jack to connect a keyboard or other line level signal to the corresponding channel by means of a shielded instrument cable.

10. EQUALIZATION: Use this five-band graphic equalizer to shape the output of the amplifier to best suit your tastes and to compensate for room acoustics.

11. REVERB RETURN: Use this control to adjust the overall amount of reverberation applied to the output signal. This control works in conjunction with each channel's Rev/Eff control (#5).

12. LEVEL: Use this control to adjust the overall output level of the amplifier.

13. EFFECTS RETURN: Use this control to adjust the amount of external effect (if used) from the Patch Bay Send and Return (#17, 18). This control works in conjunction with each channel's Rev/Eff control (#5).

14. LINE OUT / HEADPHONES LEVEL: Use this control to adjust the level of the signal at the Bal. Line Out jack (#21) and the 🎧 (headphones) jack (#22). This control functions independently from the Master Level control (#12).

15. ON: This LED illuminates when the amplifier is turned on.

16. (POWER): Use this switch to turn the amplifier on (top of the switch depressed) and off (bottom of the switch depressed).

17. SEND: Use this jack to send a signal from the amplifier to an external effects device. The signal at this jack is pre-EQ for reduced noise.

18. RETURN: Use this jack to return a signal to the amplifier from an external effects device. The amount of effect applied from the Send and Return jacks to the signal is governed by the Effects Return control (#13).

19. PRE AMP OUT: Use this jack to send a high impedance unbalanced signal from the amplifier to another amplifier or recording device by means of a shielded signal cable.

20. POWER AMP IN: Use this jack to connect a line level signal directly into the internal power amp circuit. When a connector is inserted into this jack, the signals from channels 1-4 are disabled.

21. BAL. LINE OUT: Use this XLR jack to send a balanced line level signal from the amplifier to an external amplifier, mixing console, or recording device by means of a balanced shielded signal cable.

22. (HEADPHONES): Use this jack to connect a pair of headphones to the amplifier. The signal at this jack is adjusted by the Bal. Line Out / Headphones Level control (#14). The internal speakers are not disconnected when headphones are used. Turn the Master Level control (#12) down for "private" practice sessions.
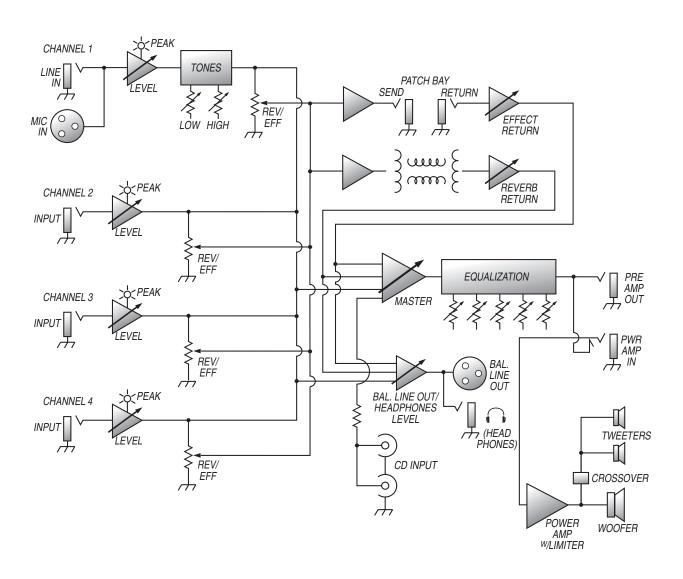
> **CAUTION: To avoid possible damage to your hearing, do not use headphones for extended periods of time at extremely loud levels.**

23. CD INPUT: Use these RCA jacks to connect the output from a CD player or tape deck to the amplifier. The signal at these jacks is combined into a mono signal which is sent to the internal power amp circuit. Use the CD or tape player's output level control to adjust the signal for the proper mix with the other channels.

24. POWER CORD (rear panel, not shown): The grounded power cord should only be plugged into a grounded power outlet that meets all applicable electrical codes and is compatible with the voltage, power, and frequency requirements stated on the rear panel. **Do not attempt to defeat the safety ground connection.**

System Block Diagram:

KXB100 TECHNICAL SPECIFICATIONS:

Maximum Signal Accepted	Ch. 1 High Z: 10 volts peak to peak; Low Z: 15 volts peak to peak
	Ch.'s 2, 3 and 4: 10 volts peak to peak
Input Power Requirements	115 VAC, 60Hz, 110VA
	100/110VAC, 50/60Hz, 110VA
	230VAC, 50/60Hz, 110VA
Nominal Input Impedance	Ch. 1 High Z: 10k ohms; Low Z: 600 ohms
	Ch's 2, 3 and 4: 24k ohms
Gain	Ch. 1: High Z: 64dB; Low Z: 70dB; Ch. 2: 57dB;
	Ch. 3: 57dB; Ch. 4: 57dB
Output Power Rating	100 watts @ 5% THD w/4 ohm load
Rotary EQ Range	Channel 1: 15dB @ 100Hz, 23dB @ 10kHz
Master EQ	±14dB @ 100Hz, 330Hz, 1kHz, 4kHz and 10kHz
Line In/Line Out	1 volt RMS
Limiter Range	20dB, maximum distortion 1%
Speaker Size and Rating	15" Crate Custom Design w/2.5" voice coil and 56 oz. magnet
	2 HF drivers
Cabinet Size and Weight	24.5" H x 21" W x 18.25" D, 69 lbs.

recyclable